ELAND[®] CABLES

N2XSY XLPE PVC - 12/20 (24)kV Cable



Eland Product Group: A9X

APPLICATION

Medium voltage cables for distribution networks; also for connection to generation units and plant and process connection. To be laid directly in ground, outdoors, indoors and in cable ducts.

CHARACTERISTICS

Voltage Rating Uo/U (Um) 12/20 (24)kV

Temperature Rating

Maximum conductor operating temperature: 90°C Initial temperature at S.C.C for metallic screen: 80°C Maximum conductor temperature during S.C: 250°C

Minimum Bending Radius

15 x overall diameter

CONSTRUCTION

Conductor Class 2 Stranded copper conductor

Inner Semi-Conductive Layer Semi-conductive material (Bonded Type)

Insulation XLPE (Cross-Linked Polyethylene)

Outer Semi-Conductive Layer Semi-conductive material (Strippable Type)

Screen Copper wires with Open Helix Copper Tape Screen

Sheath PVC (Polyvinyl Chloride)

Sheath Colour

Red
Black

STANDARDS

IEC 60502-2, IEC/EN 60228

Flame Retardant according to IEC/EN 60332-1-2 UV Resistant

THE CABLE LAB[®] AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability



REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.



DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL SCREEN CROSS SECTIONAL AREA mm ²	NOMINAL INSULATION THICKNESS mm	NOMINAL SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
A9X20KV1050	1	50	16	5.5	1.8	26	1056
A9X20KV1070	1	70	16	5.5	1.9	28	1301
A9X20KV1095	1	95	16	5.5	1.9	29.3	1567
A9X20KV1120	1	120	16	5.5	2	30.9	1840
A9X20KV1150	1	150	25	5.5	2	32.7	2221
A9X20KV1185	1	185	25	5.5	2.1	34.2	2572
A9X20KV1240	1	240	25	5.5	2.2	36.8	3182
A9X20KV1300	1	300	25	5.5	2.2	39.2	3764
A9X20KV1400	1	400	35	5.5	2.3	42.2	4715
A9X20KV1500	1	500	35	5.5	2.4	45.8	5748
A9X20KV1630	1	630	35	5.5	2.5	50.7	7215
A9X20KV1800	1	800	35	5.5	2.7	55.2	9072

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20 °C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50HZ Ω/Km	CAPACITANCE µF/Km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT 50 HZ ohm/km	CONDUCTOR S.C.C FOR 1 SEC KA	COPPER SCREEN S.C.C FOR 1 SEC KA	CURRENT RATING A	
									Laid in ground	Laid in free air
50	0.387	0.494	0.184	0.693	33.24	0.133	7.15	3.2	234	245
70	0.268	0.342	0.209	0.787	37.78	0.126	10.01	3.2	284	309
95	0.193	0.247	0.227	0.855	41.03	0.121	13.585	3.2	337	378
120	0.153	0.196	0.246	0.928	44.52	0.117	17.16	3.2	384	436
150	0.124	0.159	0.268	1.01	48.48	0.112	21.45	5.0	428	491
185	0.0991	0.128	0.288	1.087	52.18	0.109	26.455	5.0	483	567
240	0.0754	0.098	0.321	1.21	58.08	0.104	34.32	5.0	553	669
300	0.0601	0.078	0.353	1.333	63.97	0.101	42.9	5.0	621	772
400	0.047	0.062	0.388	1.465	70.33	0.097	57.2	7.1	697	883
500	0.0366	0.049	0.434	1.638	78.63	0.094	71.5	7.1	783	1019
630	0.0283	0.039	0.498	1.876	90.08	0.092	90.09	7.1	866	1153
800	0.0221	0.032	0.553	2.084	100.05	0.089	114.4	7.1	945	1299

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity 120 °C.Cm/Watt

-Burial depth 0.5 m

-Ground temperature 15 °C

-Air temperature 25 °C

-Frequency 50 Hz

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.